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REMARKS

Claims 1-10, 15-20, 30-40, 43-47, 52, and 53 are currently pending in the subject application and are presently under consideration. Applicants' representative affirms the election of Group I (claims 1-10, 15-20, 30-40, 43-47, 52, and 53) with traverse. Accordingly, claims 11-14, 21-29, 41-42, and 48-51 have been withdrawn. Additionally, claims 1, 4, 6, 30, 35, 43, 44, 45, 46, and 47 have been amended herein to further emphasize novel aspects of the invention, and claims 2 and 3 have been cancelled. New claims 52 and 53 have been added to emphasize various novel aspects of the subject invention already recited in the pending claims. The new claims do not raise issues requiring further search or effort on behalf of the Examiner. A version of all pending claims is shown at pages 3-14 of the Reply. In addition, the specification has been amended as indicated at page 2. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 45-47 Under 35 U.S.C. §101

Claims 45-47 stand rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. It is respectfully submitted that this rejection is improper and should be withdrawn for at least the following reasons. The subject claims produce a useful, concrete and tangible result.

Because the claimed process applies the Boolean principle [abstract idea] *to produce a useful, concrete, tangible result* ... on its face the claimed process comfortably falls within the scope of §101. *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358. (Fed.Cir. 1999) (Emphasis added); *See State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601 (Fed.Cir.1998). The inquiry into patentability requires an examination of the contested claims to see if the claimed subject matter, as a whole, is a disembodied mathematical concept representing nothing more than a "law of nature" or an "abstract idea," or if the mathematical concept has been *reduced to some practical application rendering it "useful."* *AT&T* at 1357 citing *In re Alappat*, 33 F.3d 1526, 31 1544, 31 U.S.P.Q.2D (BNA) 1545, 1557 (Fed. Cir. 1994) (Emphasis added) (holding that more than an abstract idea was claimed because the claimed invention as a whole was directed toward forming a specific machine that produced the useful, concrete, and tangible result of a smooth waveform display).

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In the Office Action dated January 7, 2005, the Examiner contends, "When nonfunctional descriptive material is recorded on some computer-readable medium, it is not statutory since no requisite functionality is present to satisfy the practical application requirement." (See Office Action, pg. 4-5). However, contrary to the contentions, the Examiner has clearly mislabeled the invention in claims 45, 46, and 47 as "nonfunctional descriptive material," which, according to the MPEP, includes but is not limited to music, literary works and a compilation or mere arrangement of data. (See MPEP §2106(IV)(B)(1)). It is submitted that the proper classification is "functional descriptive material," which consists of data structures and computer programs which impart functionality when employed as a computer component. *Id.* When functional descriptive material is recorded on some computer-readable medium *it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.* *Id.* (emphasis added). In light of the amendments herein, the functional descriptive material is recorded in a computer-readable medium, permitting the function of the descriptive material to be realized.

In addition, both the claims and the specification provide examples of practical applications along with satisfactory explanations illustrating the usefulness of the invention in concrete and tangible form. For example, claims 45, 46, and 47 recite: "a first field that stores a clip identifier that identifies a portion of a media." This is a useful function, which, as noted in the preambles and the specification, facilitates the non-linear viewing of the media [by a user of the invention] in a form that is concrete and tangible.

In view of the above, it is readily apparent that the claimed invention reduces to a practical application that produces a useful, concrete, tangible result; therefore, pursuant to *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358. (Fed.Cir. 1999), the subject claims have patentable utility pursuant to 35 U.S.C. §101. Accordingly, this rejection should be withdrawn.

II. Rejection of Claims 1-6, 8-10, 43 and 44 Under 35 U.S.C. §102(e)

Claims 1-6, 8-10, 43, and 44 stand rejected under 35 U.S.C. §102(e) as being anticipated by Jain, *et al.* (U.S. 6,567,980). Withdrawal of this rejection is respectfully requested for at least

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the following reasons. Jain, *et al.* fails to teach or suggest each and every limitation as recited in the subject claims.

A single prior art reference anticipates a patent claim only if it expressly or inherently describes *each and every limitation set forth in the patent claim*. *Trintec Industries, Inc., v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 U.S.P.Q.2D 1597 (Fed. Cir. 2002); *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). *The identical invention must be shown in as complete detail as is contained in the ... claim*. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (emphasis added).

Independent Claims 1 and 6

The invention relates to annotating digital media with metadata to facilitate non-linear viewing of related scenes that are annotated with metadata. In particular, the invention employs *a scene selector that scans a digitized media and selects a scene in the digitized media based on at least one of, face recognition, item recognition, voice recognition, color recognition, mood recognition, theme recognition, and an input from a user*. This aspect of the claimed invention enables the system to continuously analyze the media to facilitate intelligent search and retrieval of related digitized media content even if the media has not already been related to metadata.

Jain, *et al.* discloses a video cataloging method wherein various types of source media inputs may be catalogued (see col. 3, ln. 56-60), however, the cited document does not teach or suggest *a scene selector that scans a digitized media and selects a scene in the digitized media based on at least one of, face recognition, item recognition, voice recognition, color recognition, mood recognition, theme recognition, and an input from a user*. The Examiner contends this limitation is disclosed because Jain, *et al.* uses advanced media analysis algorithms that automatically watch, listen to and read a video stream, the [Video Cataloger] intelligently extracts metadata-keyframes, time codes, textual information and an audio profile from the video in real-time. (See col. 2, ln. 10-19). The Examiner further states what is disclosed above means that the system is selecting scenes of importance by user preference (see Office Action, pg. 6), however, as set out in more detail below, what is disclosed is merely a means of *cataloging* all media, not *selecting* scenes based upon criteria of the digital media. In particular, the Examiner

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fails to note that the Video Cataloger does not *select a scene in the digitized media* based upon criteria of the digital media, but merely communicates with the Vidsync processes (*see col. 5, ln. 20-26*), ensures video encoding start-up and synchronization (*see col. 6, ln. 28-29*) prior to cataloging, as well as associates some initial metadata with the source video (*see col. 6, ln. 36-39*), and other functions (*see col. 8, ln. 41-47*).

Jain, *et al.* discloses a single pass cataloguer wherein video data is analyzed, associated with metadata, indexed, distributed, *etc.* The cataloguer performs only a single pass, so it does not allow for the novel functionality of the applicants' invention, which can continuously analyze the media to facilitate intelligent search and retrieval, for example, *via* a scene selector. (*See pg. 2, ln. 4-5*). Because the Jain, *et al.* cataloguer performs only a single pass, all video data is automatically analyzed (as opposed to being first selected) by the Media Capture Services (*see col. 8, ln. 51-52*), which is a main component of the Video Cataloger component (*see col. 8, ln. 25-26*), hence, there is no way disclosed, nor any reason suggested to first *select a scene* before it is catalogued. Instead the cited document merely scans all media (using various criteria such as speech recognition to associate with metadata, but in single pass fashion), which may, afterward, be selected based upon the metadata associated with the media when it was catalogued, but not based upon the criteria found in the media itself. Therefore, neither the Video Cataloger component (as the Examiner suggests), nor any other aspect of the reference teaches or suggests the limitations set forth in the applicants' invention. Accordingly, it is requested that the rejection of independent claim 1, as well as all claims that depend thereupon, be withdrawn.

Regarding independent claim 6, Jain, *et al.* does not disclose *selecting a scene from a set of digitized media based on at least one of, face recognition, item recognition, voice recognition, color recognition, mood recognition, theme recognition, and an input from a user*, as recited. Instead, as noted above, the reference annotates all media input with metadata without any selection process. Additionally, and as the Examiner notes, Jain, *et al.* provides, “[d]uring metadata capture, the user may mark video clips and annotate them.” However, these user-defined annotations occur during metadata capture, and, hence, are not selected *from a set of digitized media*. Therefore, the rejection of independent claim 6, and claims that depend therefrom, should be withdrawn.

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Independent Claims 43 and 44

The invention as claimed relates to annotating digital media with metadata to facilitate non-linear viewing of related scenes that are annotated with metadata. In particular, independent claims 43 and 44 employ *a second field that holds a metadata item related to the media item, where the metadata facilitates locating a related media item by annotating the related media with metadata, and where the metadata facilitates at least one of identifying the media item, locating the media item, and locating a related media item.* The invention also provides for, *in response to the interface element selection signal, initiating processing of related media by the metadata generator to facilitate non-linear viewing of media based, at least in part, upon stored metadata.* These aspects of the claimed invention enable the system to continuously analyze the media to facilitate intelligent search and retrieval of related content from the data store as well as other digitized media.

Jain, *et al.* processes media to generate metadata based upon various criteria. However, once the metadata is generated, subsequent searches for related media only entail a search of the metadata, not the media itself. Hence, Jain, *et al.* does not teach or suggest *a second field that holds a metadata item related to the media item, where the metadata facilitates locating a related media item by annotating the related media with metadata, and where the metadata facilitates at least one of identifying the media item, locating the media item, and locating a related media item.* Instead, the data fields only contain metadata used to locate media already associated with similar metadata. Jain, *et al.* also fails to teach or suggest *in response to the interface element selection signal, initiating processing of related media by the metadata generator to facilitate non-linear viewing of media based, at least in part, upon stored metadata.* Therefore, it is respectfully requested that the rejection of independent claims 43 and 44 be withdrawn.

III. Rejection of Claims 45-47 Under 35 U.S.C. §102(e)

Claims 45-47 stand rejected under 35 U.S.C. §102(e) as being anticipated by Morris (U.S. Patent Application: 2002/0088000). Withdrawal of this rejection is respectfully requested for at least the following reasons. Morris fails to teach or suggest each and every limitation set forth in the subject claims.

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Independent claims 45, 46, and 47 recite *a second field that stores a metadata key that identifies an annotating metadata associated with the clip identified by the clip identifier*. The invention also employs, *a second field that stores a requested user action concerning the portion identified by the clip identifier*. These aspects of the claimed invention enable the system to continuously analyze the media to facilitate intelligent search and retrieval of related content from the data store as well as other digitized media by associating metadata with metadata keys.

Morris relates to a method and system for controlling access to image metadata, and discloses the metadata for the images is preferably stored within the image file in individual image tags, each of which store various types of data that correspond and relate to particular captured image data. (See Fig. 2, item 60; para. 20). However, contrary to the Examiner's contention, Morris only stores *metadata, not a metadata key that identifies an annotating metadata associated with the clip identified by the clip identifier*. Further, and also contrary to the Examiner's contention, Morris nowhere teaches or suggests *a second field that stores a requested user action concerning the portion identified by the clip identifier*. Therefore, it is respectfully requested that the rejection of independent claims 45, 46, and 47 be withdrawn.

IV. Rejection of Claim 7 Under 35 U.S.C. §103(a)

Claim 7 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Jain, *et al.* (U.S. 6,567,980) in view of Duncombe (U.S. 6,813,745). Withdrawal of this rejection is respectfully requested for at least the following reasons. Claim 7 depends directly on independent claim 6, and Duncombe, which relates to a media system for storing media files and a media organization file, does not make up for the deficiencies of Jain, *et al.* with respect to claim 6. Accordingly, this rejection should be withdrawn.

V. Rejection of Claims 15-20 and 30-40 Under 35 U.S.C. §103(a)

Claims 15-20 and 30-40 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Jain, *et al.* (U.S. 6,567,980) in view of Duncombe (U.S. 6,792,573). Withdrawal of this rejection is respectfully requested for at least the following reasons. Jain, *et al.*, alone and/or in combination with the cited document, does not teach or suggest all limitations set forth in the subject claims.

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To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, *the prior art reference (or references when combined) must teach or suggest all the claim limitations.* See MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).

Applicants' claimed invention relates to annotating digital media with metadata to facilitate non-linear viewing of related scenes that are annotated with metadata. In particular, independent claims 15, 30, and 35 employ *a playlist generator that evaluates the one or more relationships and produces a playlist of related scenes, wherein the one or more relationships are between the one or more pieces of annotating metadata.* The invention also provides for, *a media database comprising a playlist and one or more video segments, where the video segments are associated with an annotating metadata based on at least one of, face recognition, item recognition, voice recognition, color recognition, mood recognition, theme recognition, and an input from a user.* Additionally, the invention further employs, *a selector that selects a second displayable item from the media data store based, at least in part, on a relationship between a first metadata associated with the first displayed item and a second metadata associated with the second displayable item.* These aspects of the claimed invention enable the system to continuously analyze the media to facilitate intelligent search and retrieval of related content from the data store as well as other digitized media.

Duncombe relates to a method for playing media based upon feedback from a user, and discloses the goal seeking engine selects, from the media clips, only those that are associated with the topic that matches the desired topic; and, further, selects only those media clips with matching complexity ratings, order ratings, and/or time length. (See col. 8, ln. 22-60). However, contrary to the Examiner's contention, Duncombe only selects media clips if those media clips substantially match predetermined values of topic, complexity, order and/or time length. Hence,

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Duncombe only compares media with predetermined values; it does not evaluate relationships between the metadata. Duncombe does not teach or suggest the novel feature of *a playlist generator that evaluates the one or more relationships and produces a playlist of related scenes, wherein the one or more relationships are between the one or more pieces of annotating metadata*, as recited in independent claim 15. Further, and also contrary to the Examiner's contention, Duncombe nowhere teaches or suggests *a media database comprising a playlist and one or more video segments, where the video segments are associated with an annotating metadata based on at least one of, face recognition, item recognition, voice recognition, color recognition, mood recognition, theme recognition, and an input from a user*, as recited by independent claim 30. Finally, as noted above, since Duncombe only compares media with predetermined values, it does not provide for *a selector that selects a second displayable item from the media data store based, at least in part, on a relationship between a first metadata associated with the first displayed item and a second metadata associated with the second displayable item*, as recited in independent claim 35. Therefore, it is respectfully requested that the rejection of independent claims 15, 30, and 35, as well as all claims that depend therefrom, be withdrawn.

VI. New Claims 52 and 53

New claims 52 and 53 have been added for consideration and include limitations similar to one or more claims filed with the application; and, thus, do not raise issues requiring further search or effort on behalf of the Examiner. These claims further emphasize various novel aspects of the subject invention.

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The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP304US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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